36. (Original) The method of claim 35 wherein the step of passing the second fluid through the anion exchange layer raises the pH by at least about 2 pH units.

37. (Original) The method of claim 35 wherein the pH of the second fluid is below 7.

38. (Original) The method of claim 37 wherein the pH of the second fluid is below about 6.

39. (Original) The method of claim 35 wherein a contact time with the cation exchange layer is less than a contact time with the anion exchange layer.

40. (Original) The method of claim 39 wherein the contact time with the anion exchange layer is more than about twice the contact time with the cation exchange layer.

41. (Original) The method of claim 40 wherein the contact time with the anion exchange layer is about three times the contact time with the cation exchange layer.

42. (Original) The method of claim 14 wherein the first fluid contains a first concentration of a weakly ionizable species and the third fluid contains the weakly ionizable species at a concentration that is less than about 10% of the first concentration.

43. (Original) The method of claim 21 wherein the concentration in the third fluid is less than about 5% of the first concentration.

44. (Original) The method of claim 43 wherein the concentration in the third fluid is less than about 1% of the first concentration.

45. (Original) The method of claim 42 wherein the weakly ionizable species is silica and the concentration in the third fluid is less than 1 ppb.

46. (Original) The method of claim 42 wherein the weakly ionizable species is boron and the concentration in the third fluid is less than 1 ppb.

47. (Original) The method of claim 35 wherein the cation or anion exchange layer comprises a dopant.

48. (Original) A method of purifying water comprising:

applying an electric field to an electrodeionization apparatus, the electrodeionization apparatus comprising two layers, wherein the two layers are an anion exchange layer and a cation exchange layer wherein at least one of the layers comprises a dopant;

passing a first fluid through one of the two layers to produce a second fluid; and

passing the second fluid through the other of the two layers, to produce a third fluid wherein the third fluid is at a pH that is at least about one pH unit adjusted from the pH of the first fluid.

49. (Original) The method of claim 48 further comprising passing the third fluid through a mixed ion exchange layer under the influence of an electric field.

50. (Original) The method of claim 49 wherein the feed water comprises a weakly ionizable species at a first concentration and the third fluid comprises the weakly ionizable species at a concentration that is less than about 10% of the first concentration.

51. (Original) The method of claim 50 wherein the concentration of the third fluid is less than about 5% of the first concentration.

52. (Original) The method of claim 51 wherein the concentration of the third fluid is less than about 1% of the first concentration.

53. (Original) The method of claim 50 wherein the weakly ionizable species is selected from the group consisting of silica compounds, boron compounds and carbon compounds.

54. (Original) The method of claim 50 wherein in the weakly ionizable species is a cationic species.

55. (Original) The method of claim 54 wherein the cationic species is ammonia.

56. (Original) The method of claim 48 wherein a pH of the second fluid is at least about 1 pH unit higher than a pH of the first fluid.

57. (Original) The method of claim 56 wherein the pH of the second fluid is at least about 2 pH units higher than the pH of the first fluid.

58. (Original) The method of claim 48 wherein the pH of the third fluid is at least about 1 pH unit lower than the pH of the second fluid.

59-60. Cancelled.

61. (Original) A method of purifying water comprising:

passing water through a first reverse osmosis device to produce a first fluid;

raising the pH of the first fluid, without adding an alkaline substance, to produce a second fluid; and

passing the second fluid through a second reverse osmosis device.

62. (Original) The method of claim 61 wherein the pH of the first fluid is raised by passing the fluid through an electrodeionization apparatus comprising an anion exchange layer.

63. (Original) The method of claim 62 further comprising a step of transferring a portion of the first fluid to the second reverse osmosis device without transferring the portion through the electrodeionization device.

64-66. Cancelled.

67. (Original) A method of purifying fluid comprising:

passing a feed fluid through a first electrodeionization cell to adjust pH to produce a first fluid;

passing the first fluid through a first reverse osmosis device to produce a second fluid;

passing the second fluid through a second electrodeionization cell to adjust pH to produce a third fluid; and

passing the third fluid through a second reverse osmosis device to produce a purified fluid.

68. (Original) The method of claim 67 wherein the first electrodeionization cell and the second electrodeionization cell are in the same electrodeionization device.

69. (Original) The method of claim 67 wherein the pH is first lowered and then raised.

70. (Original) The method of claim 67 wherein the pH is first raised and then lowered.

71. (Original) The method of claim 67 wherein the pH is raised by passing fluid through an electrodeionization cell comprising a majority of anion resin.

72. (Original) The method of claim 67 wherein the pH is lowered by passing the fluid through an electrodeionization cell comprising a majority of cation resin.

73. (Original) The method of claim 71 wherein the fluid passes through an electrodeionization cell comprising a layer of cation resin followed by a layer of anion resin.

74. (Original) The method of claim 67 wherein the purified fluid contains weakly ionizable cations and weakly ionizable anions at concentrations that are below the concentrations of the same cations and anions in the feed fluid.

75. (Original) The method of claim 74 wherein the concentrations in the purified fluid are less than 1% of the concentration in the feed fluid.

76-92. Cancelled.

93. (Original) A method comprising:

passing feed water sequentially through three layers, a first layer comprising anion and cation exchange resin, a second layer comprising anion exchange resin, and a third layer comprising cation exchange resin.

94. (Original) The method of claim 93 wherein the feed water is pre-treated by reverse osmosis.